

MICROELECTRONIC DEVICE HAVING A PLURALITY OF STACKED DIES AND
METHODS FOR MANUFACTURING SUCH MICROELECTRONIC ASSEMBLIES

ABSTRACT OF THE DISCLOSURE

Systems and methods for assembling microelectronic devices that have a base die and a conventional wire-bond die stacked on the base die. In one embodiment of a method in accordance with the invention, a base die is placed on a substrate and then a first stacked die is subsequently stacked on the base die. The first stacked die is stacked on the base die in a single pass through a die attach machine without first storing or otherwise processing the base die/substrate assembly in a separate machine. The stacked die, moreover, can be stacked onto the base die before heating the base die to reflow a solder or otherwise attach the base die to the substrate. After stacking the first stacked die on the base die, the complete die assembly can be heated to (a) secure the base die to the substrate, and (b) secure the first stacked die to the base die.